



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,926	02/01/2006	Joachim W. Zech	58746US004	1152
32692 7590 06/23/2008 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
EXAMINER LOEWE, ROBERT S				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
06/23/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com
LegalDocketing@mmm.com

Office Action Summary

Application No.

10/566,926

Applicant(s)

ZECH ET AL.

Examiner

ROBERT LOEWE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☒ Claim(s) 2-4, 8 and 10 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 11/1/07
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 13-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/28/08. Claims 1-12 are currently pending.

Claim Objections

Claims 2, 3, 4 and 8 are objected to because of the following informalities: "10.000" is incorrect and should be changed to --10,000--. Appropriate correction is requested.

Claim 4 is objected to because of the following informalities: "Methoxy or Ethoxy" is incorrect and should be changed to --methoxy or ethoxy--. Appropriate correction is requested.

Claim 10 is objected to because "weight" is misspelled. Appropriate correction is requested.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the limitation "formula II, III, IIIa, IIIb, IV, V, Va, Vb, VI, VII, VIIa

or VIIb" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim. Claim 8 does not depend from claims 2, 3 or 4, which include such formulae. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bublewitz et al. (US 2002/0147275).

Claim 1: Bublewitz et al. teaches a curable composition comprising (a) a polysiloxane having at least two vinyl groups (paragraphs 0087 and 0181), (b) an organohydrogenpolysiloxane (abstract), (c) at least one alkylsiloxane having at least one carbinol, carboxy or amino group (paragraphs 0082-0086), (d) a condensation curing catalyst (abstract), and (e) a hydrosilation catalyst (abstract) which can be platinum, palladium and rhodium (paragraph 0093). More specifically, Bublewitz et al. teaches that component (c) is a compound having at least one alkynyl group **and/or** at least one Si-OH structural unit. Bublewitz et al. therefore does not require the presence of any Si-OH structural units. Further, the compounds having at least one alkynyl group are shown in paragraph 0083 (top structure on page 4). R³ and R⁴ are taught to be monovalent groups, including alkyl groups (paragraph 0074). R¹ is taught to be monovalent groups, such as alkyl, hydroxyl, and acyl (paragraph 0072) and R⁵

can be **alkylhydroxyl** (carbinol), **aminoalkyl** and **carboxyalkyl**, amongst others (paragraph 0086).

Claim 5: Bublewitz et al. further teaches one or more adjuvants (paragraphs 0049-0058).

Claims 6, 7, 9 and 10: Bublewitz et al. further teaches a composition having ingredients (a) through (f) in the amounts as required by instant claim 6 (example 4, paragraphs 0180-0184). Specifically, part (A) of the two-part composition consists of 78 parts of adjuvants (67 parts silica, 1 part of silicic acid, 2 parts of sieves and 8 parts of mineral oil), 21 parts of a polysiloxane having two vinyl groups, 0.5 parts of a condensation curing catalyst, 0.5 parts of a platinum catalyst [100 parts total in part (A)]. Part (B) of the two-part composition consists of 78 parts of adjuvants (67 parts silica, 1 part of silicic acid, 2 parts of sieves and 8 parts of mineral oil), 5 parts of an organohydrogenpolysiloxane, 7 parts of a polysiloxane having two vinyl groups, and 10 parts of a compound having an Si-OH group. Bublewitz et al. teaches that at least one compound having an alkynyl group can be used in place of the Si-OH group [100 parts total in part (B)]. Therefore, according to Bublewitz et al., there can be 10 parts of a compound having an alkynyl group, such as those taught in paragraphs 0082-0086. Part (A) and part (B) together have 200 parts. Fifty parts of part (a) are mixed with 50 parts of part (b). In total there is 14 parts/weight % of component (a) (28/200), 2.5 parts/weight % of component (b) (5/200), 5 parts/weight % of component (c) (10/200), 0.25 parts/weight % of component (d) (0.5/200), and 0.25 parts/weight % of component (e) (0.5/200). Bublewitz et al. teaches that part (A) comprises components (a), (b) and (c) and part (B) comprises components (d) and (e) as required by instant claim 7.

Claim 11: Bublewitz et al. further teaches that the additional ingredients/adjuvants may be inert carrier materials, inhibitors and fillers (paragraphs 0053-0057).

Claim 12: Bublewitz et al. further teaches mixing components (a) through (e) of instant claim 12 as evidenced by example 4 (paragraphs 0180-0184).

Claims 1, 2, 5, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray et al. (US Pat. 5,595,826) and cited on a previous PTO-892 form.

Claims 1 and 2: Gray et al. teaches a curable organopolysiloxane composition comprising (a) 10 parts of an organopolysiloxane having at least two alkenyl groups (2:26-29), (b) an organohydrogenpolysiloxane (2:30-32), (c) a platinum addition catalyst (2:33-34), (d) a compound such as those taught in formula (13) of Gray et al. and (e) a condensation curing catalyst (2:41-43). The compounds represented by formula (13) are alkylsiloxanes which may have a carbinol group. Further, when R⁶ of formula (13) is an alkyl group and R⁵ is a vinyl group and R⁷ is a carbinol functional aliphatic or aromatic radical, Gray et al. satisfies the structural limitations of formula (IIIa) of instant claim 2.

Claims 5 and 11: Gray et al. further teaches that fillers may be added to the composition (7:3-11).

Claim 12: Gray et al. teaches that the components of the composition are mixed together, thus preparing the composition (7:20-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bublewitz et al. (US 2002/0147275).

Claim 2: Bublewitz et al. teaches the composition of instant claim 1, as described above. Bublewitz et al. further teaches that the compound having an alkynyl group, such as the one shown on the top left of page 4 serves as component (c) of the instant claims. Bublewitz et al. teaches that R¹, R³, and R⁴ can be alkyl groups, such as methyl and further teaches that R⁵ is an alkylhydroxyl group (paragraph 0086). When this is the case, the resulting polysiloxane anticipates or renders obvious the structural limitations of formula (II) of instant claim 2 (b = d =

Art Unit: 1796

$c = 0$ and $c = 1$). The CCH (ethynyl) group attached at the polysiloxane terminus satisfies the limitation of Y of instant claim 1. Subscript "a" of instant claim 2 (which can be from 1 to 10,000) is equivalent to subscript "n" of Bublewitz et al. (which can be from 0 to 6,000). There is significant overlap in the values of "n" as taught by Bublewitz et al. and "a" as in instant claim 2. Bublewitz et al. only defines alkylhydroxyl group in a generic sense, (i.e., no mention of alkyl group chain lengths are taught). Nevertheless, the most obvious choice to a person having ordinary skill in the art for an alkylhydroxyl group would be one wherein the alkyl chain length does not exceed a few carbons in length, and certainly not exceeding 10 carbons in length.

Claim 3: Bublewitz et al. teaches the composition of instant claim 1, as described above. Bublewitz et al. further teaches that the compound having an alkynyl group, such as the one shown on the top left of page 4 serves as component (c) of the instant claims. Bublewitz et al. teaches that R^1 , R^3 , and R^4 can be alkyl groups, such as methyl and further teaches that R^5 is a carboxyalkyl group (paragraph 0086). When this is the case, the resulting polysiloxane anticipates or renders obvious the structural limitations of formula (IV) of instant claim 3 ($b = d = c = 0$ and $c = 1$). The CCH (ethynyl) group attached at the polysiloxane terminus satisfies the limitation of Y of instant claim 1. Subscript "a" of instant claim 2 (which can be from 1 to 10,000) is equivalent to subscript "n" of Bublewitz et al. (which can be from 0 to 6,000). There is significant overlap in the values of "n" as taught by Bublewitz et al. and "a" as in instant claim 3. Bublewitz et al. only defines carboxyalkyl group in a generic sense, (i.e., no mention of alkyl group chain lengths are taught). Nevertheless, the most obvious choice to a person having ordinary skill in the art for an carboxyalkyl group would be one wherein the alkyl chain length does not exceed a few carbons in length, and certainly not exceeding 10 carbons in length.

Claim 4: Bublewitz et al. teaches the composition of instant claim 1, as described above. Bublewitz et al. further teaches that the compound having an alkynyl group, such as the one shown on the top left of page 4 serves as component (c) of the instant claims. Bublewitz et al. teaches that R^1 , R^3 , and R^4 can be alkyl groups, such as methyl and further teaches that R^5 is an aminoalkyl group (paragraph 0086). When this is the case, the resulting polysiloxane anticipates or renders obvious the structural limitations of formula (VI) of instant claim 4 ($b = d = c = 0$ and $c = 1$). The CCH (ethynyl) group attached at the polysiloxane terminus satisfies the limitation of Y of instant claim 1. Subscript "a" of instant claim 2 (which can be from 1 to 10,000) is equivalent to subscript "n" of Bublewitz et al. (which can be from 0 to 6,000). There is significant overlap in the values of "n" as taught by Bublewitz et al. and "a" as in instant claim 4. Bublewitz et al. only defines aminoalkyl group in a generic sense, (i.e., no mention of alkyl group chain lengths are taught). Nevertheless, the most obvious choice to a person having ordinary skill in the art for an aminoalkyl group would be one wherein the alkyl chain length does not exceed a few carbons in length, and certainly not exceeding 10 carbons in length.

Claim 8: Bublewitz et al. further teaches that component (c) of instant claim 7 may be compounds containing an alkynyl group such as those taught in paragraphs 0082-0086 and can include those having alkylhydroxyl, carboxyalkyl and aminoalkyl functionality. The structures of formula (II), (IV) and (VI) of instant claims 2-4, as described above.

Relevant Art Cited

The prior art made of record and not relied upon but is considered pertinent to applicants disclosure can be found on the attached PTO-892 form.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571) 270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1796
4-Jun-08

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796